



HVAC/R Program  
Board of Trustees Meeting  
June 12, 2024



## Presentation



### Acknowledgement

ICCB Program of Study



### Industry Requirements

OSHA

Apprenticeships

Refrigerant Handling Certification



### Curriculum Overview

Credentials

Learning methodologies

Employment Ready Certifications



### Incentives/Industry

DOE Mandates

Low Temp. Heat pumps

Flammable Refrigerants

Building Automation Training



### Student Learning

Training Facilities



### Industry Partnerships

Internships

AMCA

York



## Model Program of Study Selection

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Harper's HVAC-R program was selected to become a Model Program of Study out of all the Program of Study submissions in the State

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The primary purpose and goals of the Model Programs of Study are to:

1. Provide guidance for local programs to adopt as they develop programs of study.
  2. Establish a framework for State agencies to develop and implement program supports.
  3. Identify priority dual credit courses that are foundational to the industry area.
  4. Define the competencies that should be sequenced across a program of study course.
  5. Identify entry points for employers to support coursework and related experiences.
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# Program Curriculum

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## Associates in Applied Science

Refrigeration and Air Conditioning Technology

### Certifications

- ❖ Residential Heat & Air Conditioning Refrigeration
- ❖ Residential Comfort Systems
- ❖ Refrigeration Service
- ❖ Heating Service
- ❖ Air Conditioning & Refrigeration Service

## Learning Methodologies

Traditional Classroom Lessons

Open Entry



### Employment Ready Certification

- ❖ **Gas Heat** (*exam code G-25*)
- ❖ **Electrical** (*exam code E-01*)
- ❖ **Air Conditioning** (*exam code A-02*)
- ❖ **Commercial Air Conditioning** (*exam code C-04*)

The exams are used to assess the technical skill levels students are achieving as required by industry standards

## Residential HVAC Systems



## Light Commercial HVAC Systems



## Commercial Systems



## Building Energy System Technology

## Community Education

### Occupational Safety & Health Training



### Refrigerant Handling Certification



**Federal Clean Air Act**  
**Section 608**  
May 31, 1994

### Apprenticeship Programs





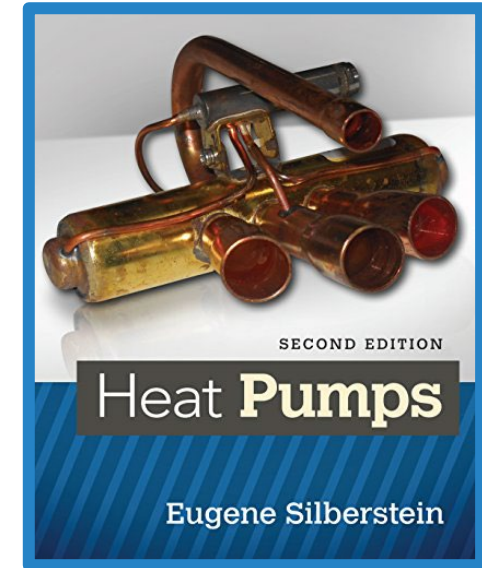
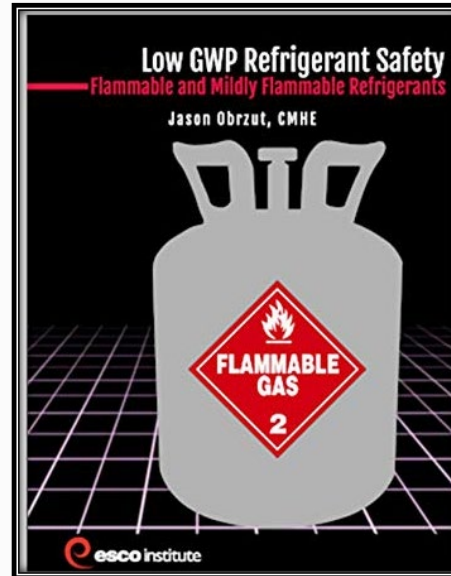
U.S. DEPARTMENT OF  
**ENERGY**

## Curriculum Updates

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New course focusing on:

- VRV Systems
  - Mini Split Systems
  - A2L Refrigerant Systems
  - Low-Temperature Heat Pumps
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# Initiatives

**Flammable Refrigerant Training: Equipment** installation of a residential HVAC system and ductless systems.



**A2L  
Flammable Refrigerant  
Training**



**Heat Pumps & Mini Splits Training**



**Residential HVAC  
Training Systems**



# Building Automations Training





## Industry Partners



## Internships & Student Resources



**Lucas Hudson**



**Erin Chapa**



**Pip Tegtmeyer**



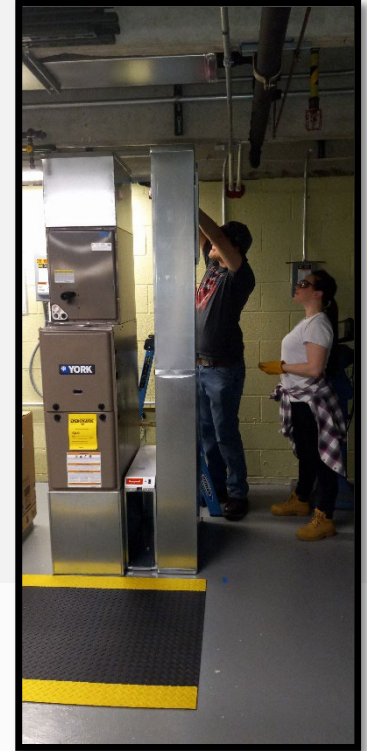
## Residential Comfort Systems Donation





# Student Learning

Residential Comfort Systems





## School-To-Work: Learning from an Industry Perspective

**amca** INTERNATIONAL

**Lisa Cherney**  
Education Manager



AMCA International  
Welcomes



Harper College

*"Fundamentals of Airflow"  
Class Training Session*



**Student Learning**

**Thank You!**



# HVACR Program



**2024**



## Closing Remarks

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## Career & Technical Programs

